AMENDMENT TO THE CLAIMS

Claims 1, 4-8, 10, 11, 13, 14, 17-21, 23, 24, 27-30 and 32-34 are currently pending. Claims 10, 13, 17, and 34 have been canceled. Claims 1, 4, 5, 8, 14, 18, 19, 24, 27, and 28 are currently amended. Claim 32 is withdrawn. Claims 35-37 are new. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for ~~screening~~ identifying a patient ~~for the presence of~~ as a candidate for additional colorectal cancer testing, comprising the steps of:

~~measuring~~ determining a quantitative amount of genome equivalents of patient genomic DNA in a stool sample comprising shed cells ~~or~~ and cellular debris, wherein the quantitative amount of genome equivalents is ~~measured~~ determined by measuring an amount of nucleic acid fragments, said fragments having length of ~~less than~~ 200 bp or less; and

identifying the patient as a candidate for additional cancer testing if the amount of genome equivalents is above a predetermined threshold amount of genome equivalents.

2.-3. (Canceled)

4. (Currently Amended) The method of claim 1, further comprising the step of performing an additional assay on a stool sample from the patient if the patient is identified as a candidate for additional cancer testing.

5. (Currently Amended) The method of claim 4, wherein the assay is selected from the group consisting of a DNA integrity assay, mutation detection, enumerated loss of heterozygosity (LOH), expression assays, and fluorescent in situ hybridization (FISH).

6. (Original) The method of claim 4, wherein the assay detects mutations at a genetic locus selected from the group consisting of p53, ras, APC, DCC, and BAT-26.

7. (Previously Presented) The method of claim 1, further comprising the step of performing a diagnostic examination on the patient if the patient is identified as a candidate for additional cancer testing.

8. (Currently Amended) The method of claim 7, wherein the step of performing a diagnostic examination is selected from the group consisting of a colonoscopy, a sigmoidoscopy, a fecal ~~ocult~~ occult blood testing and an upper gastrointestinal evaluation.

9.-10. (Canceled)

11. (Previously Presented) The method of claim 1, wherein the cancer is colorectal cancer or pre-cancer.

12.-13. (Canceled)

14. (Currently Amended) A method for screening a patient for the presence of abnormal proliferating colorectal cancer cells, comprising the steps of:

~~measuring~~ determining a quantitative amount of genome equivalents of patient genomic DNA in a stool sample comprising shed cells ~~or~~ and cellular debris, wherein the quantitative amount of genome equivalents is ~~measured~~ determined by measuring an amount of nucleic acid fragments, said fragments having length of ~~less than~~ 200 bp or less; ~~and~~

identifying a positive screen as a sample in which the amount of genome equivalents is above a predetermined threshold amount of genome equivalents; and

performing at least one additional assay on a stool sample from the patient identified as a positive screen, wherein a positive result of said at least one additional assay indicates the patient has abnormal proliferating colorectal cancer cells.

15.-17. (Canceled)

18. (Currently Amended) The method of claim ~~17~~ 14, wherein the at least one additional assay comprises at least one member ~~assay is~~ selected from the group consisting of a DNA integrity assay, mutation detection, enumerated loss of heterozygosity (LOH), expression assays, and fluorescent in situ hybridization (FISH).

19. (Currently Amended) The method of claim ~~17~~ 14, wherein the at least one additional assay ~~detects~~ comprises detection of mutations at a genetic locus selected from the group consisting of p53, ras, APC, DCC, and BAT-26.

20. (Original) The method of claim 14, further comprising the step of performing a diagnostic examination on the patient if a positive screen is identified in the identifying step.

21. (Original) The method of claim 20, wherein the step of performing a diagnostic examination is selected from the group consisting of a colonoscopy, a sigmoidoscopy, a fecal occult blood testing and an upper gastrointestinal evaluation.

22.-23. (Canceled)

24. (Currently Amended) A method for diagnosing colorectal cancer in a patient, comprising the steps of:

~~measuring~~ determining a quantitative amount of genome equivalents of patient genomic DNA in a stool sample comprising shed cells ~~or~~ and cellular debris, wherein the quantitative amount of genome equivalents is ~~measured~~ determined by measuring an amount of nucleic acid fragments, said fragments having length of ~~less than~~ 200 bp or less; and

if the amount of genome equivalents is above a predetermined threshold amount of genome equivalents, performing at least one ~~an~~ additional assay to determine if the patient has colorectal cancer, wherein a positive result of said at least one additional assay indicates that the patient has colorectal cancer.

25.-26. (Canceled)

27. (Currently Amended) The method of claim 24, wherein the at least one additional assay comprises at least one member ~~assay is~~ selected from the group consisting of a DNA integrity assay, mutation detection, enumerated loss of heterozygosity (LOH), expression assays, and fluorescent in situ hybridization (FISH).

28. (Currently Amended) The method of claim 24, wherein the at least one additional assay ~~detects~~ comprises detection of mutations at a genetic locus selected from the group consisting ofp53, ras, APC, DCC, and BAT-26.

29. (Original) The method of claim 24, wherein the method further comprises performing a diagnostic examination of the patient.

30. (Original) The method of claim 29, wherein the diagnostic examination is selected from the group consisting of a colonoscopy, a sigmoidoscopy, a fecal occult blood testing and an upper gastrointestinal evaluation.

31. (Canceled)

32. (Withdrawn) The method of claim 24, wherein the patient sample is selected from the group consisting of sputum, pancreatic fluid, bile, lymph, blood, urine, cerebrospinal fluid, seminal fluid, saliva, breast nipple aspirate, and pus.

33. (Previously Presented) The method of claim 24, wherein the cancer is colorectal cancer or pre-cancer.

34. (Canceled)

35. (New) The method of claim 1, wherein the amount of nucleic acid fragments is determined by quantitative PCR.

36. (New) The method of claim 14, wherein the amount of nucleic acid fragments is determined by quantitative PCR.

37. (New) The method of claim 24, wherein the amount of nucleic acid fragments is determined by quantitative PCR.